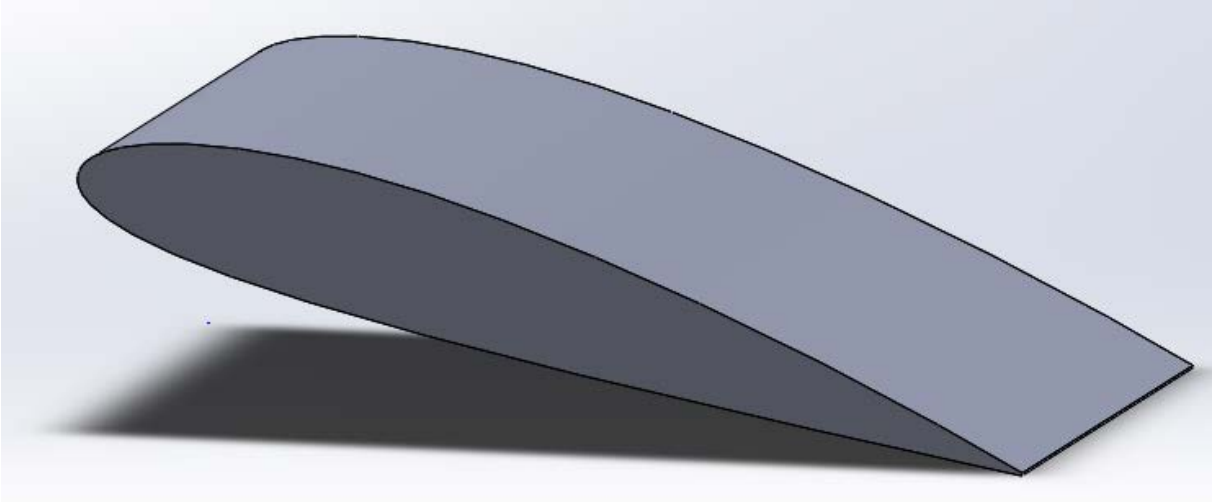
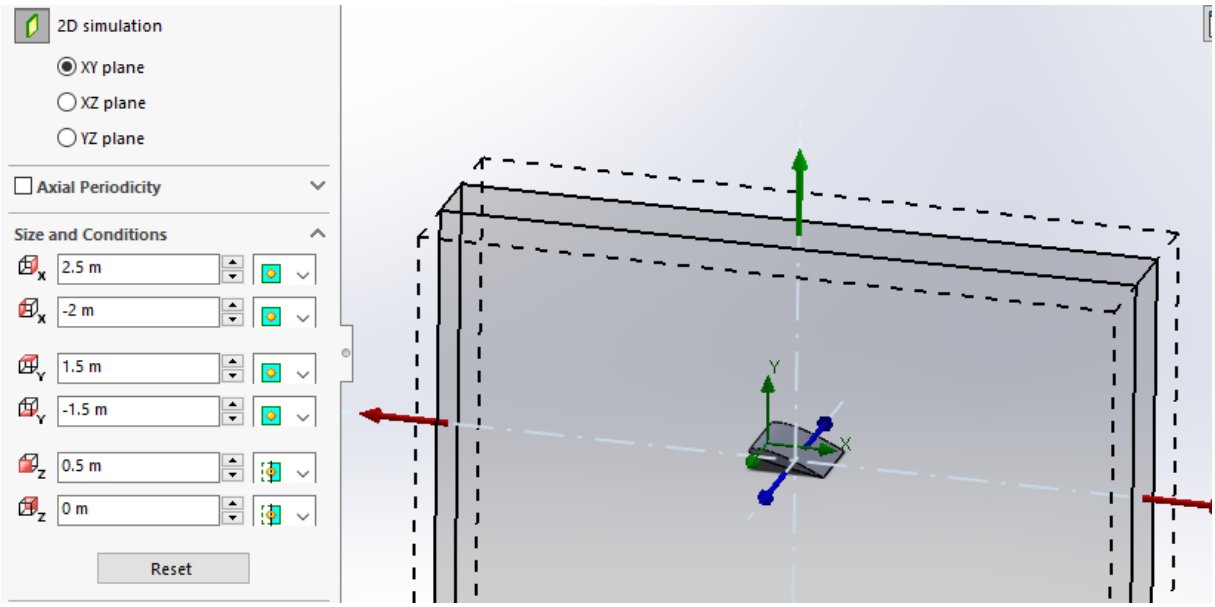
Laboratorium nr 12 - Modelowanie opływu powietrza wokół skrzydła samolotu	
Radosław Jurczak, GĆL03	Data ćwiczenia: 25.05.2021

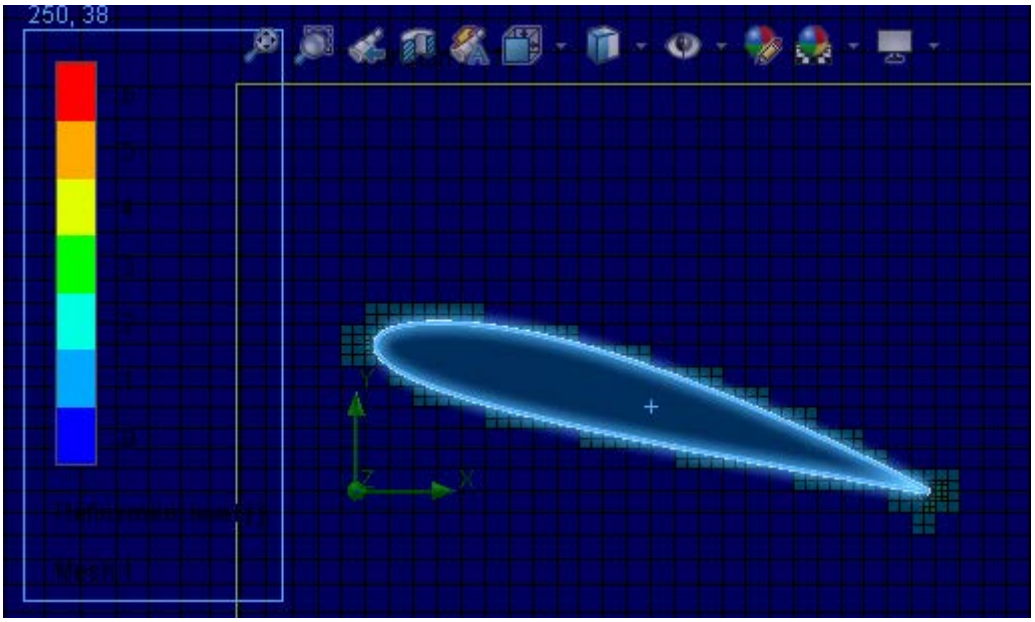
1. Przygotowanie modelu bazowego.



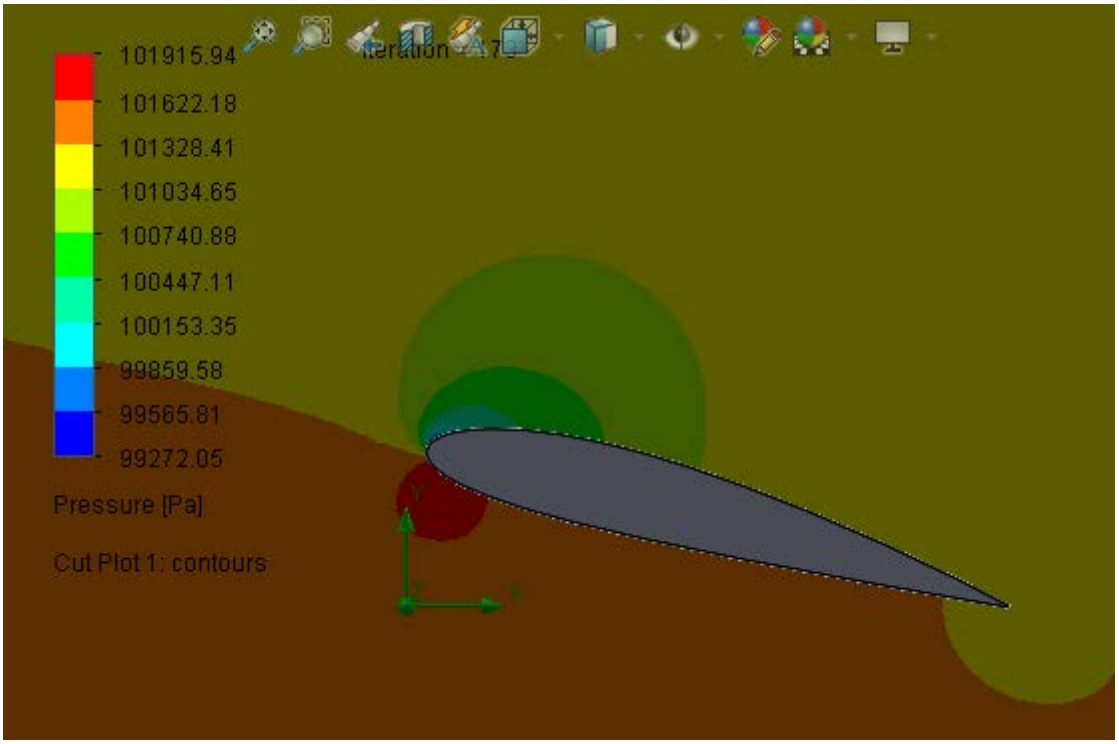
2. Przygotowanie badania przepływu powietrza



Siatka MES:



Rozkład ciśnienia:



Ustawienie opcji badania parametrycznego:

Input Variables | Output Parameters | Scenario

Parameter	Current Value	Variation Type	#	Values
Velocity in X direction (Initial and Ambient Conditions)	30 m/s	Discrete Values	6	30, 60, 90, 120, 150, 180

Dodanie parametrów wyjściowych i uruchomienie:

Input Variables | Output Parameters | Scenario | Goals

Run | Maximum simultaneous runs: 1

Summary	Design Point 1	Design Point 2	Design Point 3	Design Point 4	Design Point 5	Design Point
Velocity in X direction (Initial and Ambient Conditions) [m/s]	30	60	90	120	150	180
Opór [N]	?	?	?	?	?	?
Siła nośna [N]	?	?	?	?	?	?
Status	Not calculated	Not calculated	Not calculated	Not calculated	Not calculated	Not calculate
Run at	[auto]	[auto]	[auto]	[auto]	[auto]	[auto]
Number of cores	[use all]	[use all]	[use all]	[use all]	[use all]	[use all]
Recalculate	☐	☐	☐	☐	☐	☐
Take previous results	☐	☐	☐	☐	☐	☐
Save full results	☑	☑	☑	☑	☑	☑

Ready to run

Otrzymane wyniki:

Summary	Design Point 1	Design Point 2	Design Point 3	Design Point 4	Design Point 5	Design Point 6
Velocity in X direction (Initial and Ambient Conditions) [m/s]	30	60	90	120	150	180
Opór [N]	14.3405337	58.1083646	135.674139	228.453231	379.905645	683.772785
Siła nośna [N]	148.030094	638.344895	1390.98961	2307.45428	3015.60016	3327.97634
Status	Finished	Finished	Finished	Finished	Finished	Finished
Run at	This computer	This computer	This computer	This computer	This computer	This computer
Number of cores	4	4	4	4	4	4

Prędkość [m/s]	30	60	90	120	150	180
Liczba Reynoldsa	992654	1985309	2977963	3970617	4963272	5955926
Opór [N]	14,341	58,108	135,674	228,453	379,906	683,773
Siła nośna [N]	148,030	638,345	1390,990	2307,454	3015,600	3327,976